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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/614,080	07/08/2003	Atsuhisa Nakashima	116453	8336
25944	7590	08/24/2004	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			HSIEH, SHIH WEN	
			ART UNIT	PAPER NUMBER
			2861	

DATE MAILED: 08/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/614,080

Applicant(s)

NAKASHIMA, ATSUSHI

Examiner

Shih-wen Hsieh

Art Unit

2861

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 24 is/are allowed.
- 6) ☒ Claim(s) 1, 10, 14-17, 21-23 and 25 is/are rejected.
- 7) ☒ Claim(s) 2-9, 11-13, 18-20 and 26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2-26-04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 10, 14, 17, 21 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Corrado et al. (US Pat. No. 5,251,348).

In regard to:

Claim 1:

Corrado et al. teach:

A conveyor cleaner comprising:

an adhesive layer formed by a viscous body, refer to col. 1, lines 64-66; and

a cleaning roller (21, 22 or 23, fig. 1) whose circumferential surface is covered with the adhesive layer, wherein the cleaning roller is rotatable with the adhesive layer

being in contact with a convey face of a conveyor (10, fig. 1) for conveying a medium (such as paper, film, etc.), refer to col. 1, lines 10-14 and col. 1, line 64 to col. 2, line 2.

Claim 10:

Corrado et al. and the background of the invention teach:

wherein the adhesive layer can be either in contact with or separate from the conveyor face of the conveyor, refer to col. 1, lines 21-23.

Claim 14:

Corrado et al. further teach:

wherein the cleaning roller comprises a shaft (refer to figs. 2 and 3, where the shaft, which is not numbered is in the center of the roller) as a center of rotation and a base body (the roller itself) covering a circumferential surface of the shaft (refer to fog. 3 for coverage), and the adhesive layer is provided on a circumferential surface of the base body.

Claim 17:

Corrado et al. further teach:

wherein the base body entirely covers the circumferential surface of the shaft, refer to fig. 3, the length "L".

Claim 21:

Corrado et al. further teach:

wherein the conveyor is a belt (10, fig. 1) stretched between and wrapped around conveyor rollers (11, fig. 1), and the cleaning roller can be rotated with the adhesive layer being in contact with a wrapped portion of the conveyor face of the belt on one of

Art Unit: 2861

the conveyor rollers. Examiner's note: fig. 1 has indicated the web (10, corresponds to the belt) wraps around the conveyor roller (11), as the roller (11) rotates, the web moves as the arrow indicated, the portion of the web, which wraps around the roller becomes in contact with the rolls (21, 22 or 23) in the course of the web movement and being cleaned by the rolls. Or, in another words, the originally wrapped around the roller portion of the web has advanced to a position where the clean roll is located.

Claim 23:

A conveyor cleaner comprising:

a cleaning roller;

an adhesive layer formed by a viscous body and covering a circumferential surface of the cleaning roller; and

a mechanism for moving at least one of a conveyor and the cleaning roller so that the adhesive layer can be selectively at a position where the adhesive layer is in contact with a conveyor face of a conveyor for conveying a medium and a position where the adhesive layer is separated from the conveyor face of the conveyor.

Rejection:

This claim is a combination of claim 1 and claim 10, and is rejected on the basis as set forth for these two claims discussed above.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 15, 16, 22 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Corrado et al.

In regard to:

Claims 15, 16 and 22:

Corrado et al. teach the roll is a steel roll, refer to col. 1, lines 64-66.

Therefore the device of Corrado et al. DIFFERS from claims 15 and 16 in that it does not teach:

wherein the base body is made of one of a foaming material and a nonwoven fabric (claim 15);

wherein the base body is made of an elastic material (claim 16); and

wherein one of the conveyor face of the conveyor and the adhesive layer is made of a silicon-base material and the other is made of a non-silicon-base material (claim 22).

Therefore it would have been obvious to a person having ordinary skill in the art at the time the invention was made to select a material as the material for the base body of the roller or the roll; the conveyor and the adhesive layer, since it has been held to be

Art Unit: 2861

within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use, refer to MPEP 2144.07.

Claim 25:

The device of Corrado et al. DIFFERS from claim 25 in that it does not teach:
an ink-jet head for ejecting ink onto the medium being conveyed by the conveyor.

A conveyor used in an ink jet printing system for carrying printing medium is well known in the art, the medium attached to the conveyor is either by electrostatic force or by a vacuum force, refer to MPEP 2144.03, In re Malcolm, 129 F.2d 529, 54 USPQ 235 (CCPA 1942).

Therefore it would have been an obvious matter that a web cleaning system as that taught by Corrado et al. can easily apply to an ink jet printing system using ink jet head ejecting ink technology for an intended use of the cleaning roller or rolls.

Allowable Subject Matter

6. Claim 24 is allowed.

7. Claims 2-9, 11-13, 18-20 and 26 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter:

In regard to:

Claims 2-9:

The primary reason for the allowance of claims 2-9 is the inclusion of the limitation of an insertion member for being inserted into the adhesive layer; wherein the cleaning roller is rotatable with the insertion member being inserted into the adhesive layer. It is this limitation found in each of the claims, as they are claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes these claims allowable over the prior art.

Claim 11:

The primary reason for the allowance of claim 11 is the inclusion of the limitation of wherein the adhesive layer is either in contact with or separated from the conveyor face of the conveyor in accordance with movement of the conveyor. It is this limitation found in this claim, as it is claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes this claim allowable over the prior art.

Claims 12 and 13:

The primary reason for the allowance of claims 12 and 13 is the inclusion of the limitations of a swing member supporting the cleaning roller and swingable in accordance with contact or separation between the adhesive layer and the conveyor face of the conveyor; and a biasing member for biasing the swinging member so that the adhesive layer is pressed onto the conveyor face of the conveyor. It is these

Art Unit: 2861

limitations found in each of the claims, as they are claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes these claims allowable over the prior art.

Claim 18:

The primary reason for the allowance of claim 18 is the inclusion of the limitation of wherein the base body partially covers the circumferential surface of the shaft and a gap where the circumferential surface of the shaft is not covered with the base body is filled up with the adhesive layer. It is this limitation found in this claim, as it is claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes this claim allowable over the prior art.

Claim 19:

The primary reason for the allowance of claim 19 is the inclusion of the limitation of wherein the cleaning roller is driven by driving of the conveyor. It is this limitation found in this claim, as it is claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes this claim allowable over the prior art.

Claim 20:

The primary reason for the allowance of claim 20 is the inclusion of the limitation of wherein the circumferential surface of the cleaning roller has a plurality of projected portions in a region covered with the adhesive layer. It is this limitation found in this claim, as it is claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes this claim allowable over the prior art.

Claim 26:

Art Unit: 2861


The primary reason for the allowance of claim 26 is the inclusion of the limitation of the adhesive layer is separated from the conveyor surface of the conveyor when the ink ejection face of the ink jet head is covered with the cap. It is this limitation found in this claim, as it is claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes this claim allowable over the prior art.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shih-wen Hsieh whose telephone number is 571-272-2256. The examiner can normally be reached on 7:30AM -5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, S D Meier can be reached on 571-272-2149. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SHIH-WEN HSIEH
PRIMARY EXAMINER


Shih-wen Hsieh
Primary Examiner
Art Unit 2861


SWH

Application/Control Number: 10/614,080

Page 10

Art Unit: 2861

Aug. 19, 2004